

**STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
ENERGY FACILITY SITING BOARD**

In re: The Narragansett Electric Company :
d/b/a National Grid's Notice of Intent Application :
for Approval of Reconductoring of the Existing T7 : **Docket No. SB-2008-1**
115 kV Transmission Line :

DECISION AND ORDER

I. Introduction.

On March 20, 2008, The Narragansett Electric Company d/b/a National Grid ("National Grid" or the "Company") filed a Notice of Intent Application with the Energy Facility Siting Board ("EFSB" or "Board") pursuant to the Board's Rule 1.6(f). National Grid proposes to reconductor 18 miles of the existing T7 115 kV transmission line between the Pawtucket substation and the Somerset (MA) substation. Approximately 2.7 miles of the T7 line are located in Rhode Island and are the subject of this proceeding.

II. Travel of the Case.

This case has been filed with the EFSB under Rules 1.6(f) through 1.6(h) which provides an expedited review process for (i) the construction of a power line of more than 1,000 feet, but less than 6,000 feet in length or (ii) the modification or relocation of a power line.¹ For

¹ Under the Energy Facility Siting Act (R.I. Gen. Laws § 42-98-1 et seq.), the Board's jurisdiction over power lines is limited to those of 69 kV and above. R.I. Gen. Laws § 42-98-3(d).

such projects, the EFSB Rules provide for an abbreviated application (Rule 1.6(f)) followed by a public hearing “in one or more of the cities or towns affected by [the] application” (Rule 1.6(g)). Thereafter, the Board reaches a determination within sixty (60) days of the filing as to whether the Project “may result in a significant impact on the environment or the public health, safety and welfare,” thereby requiring full EFSB review. Rule 1.6(h). The “modification” of a transmission line includes “reconductoring and rebuilding an existing power line.” Rule 1.2(d). However, “the modification or relocation of an existing power line shall not be an alteration unless the Board determines that the project may result in a significant impact on the environment or on the public health, safety and welfare.” Rule 1.2(d). If the Board determines that the project will not result in a significant impact on the environment or the public health, safety and welfare, the project does not constitute an “alteration” and the project may proceed without further review by the Board. Rule 1.2(d) and Rule 1.6(f).

As required by Rule 1.6(g), the Board held a hearing on May 15, 2008 at 7:00 P.M. at the Pawtucket City Hall, 137 Roosevelt Street, Pawtucket, Rhode Island pursuant to public notice. National Grid presented two witnesses. The first was David J. Beron of National Grid USA Service Company, Project Manager for the Project, who described the Project location and need for the Project, and explained the construction process and schedule. The second witness was Jamie Durand, senior scientist at ENSR Corporation who had written much of the Environmental Report (“ER”) that accompanied National Grid’s application. (Exhibits 2A (application) and 2B (ER) in these proceedings.) Mr. Durand described the natural and social environment of the Project area, mitigation measures and anticipated impacts. The Chairman solicited public comment at the hearing, but none was offered.

III. Statutory Standard.

As noted previously, the Board must determine whether the Project “may result in a significant impact on the environment or the public health, safety and welfare.” If the Board determines that it may have such an impact, it will determine that the Project would constitute the alteration of a major energy facility and be subject to the full EFSB permitting process. Rule 1.6(h). If it determines that the Project will not have such an impact, the applicant is authorized to proceed with the Project.

IV. Project Description.

National Grid’s project is a reconductoring project. The term “reconductoring” means the replacement of the conductors (wires) of an existing transmission line with new, larger conductors which are capable of carrying more power. The proposed work will also involve the replacement or reinforcement of existing tower structures. ER, §3.1.

A. Existing Facilities

The existing facilities are described in detail in National Grid’s application to the Board. The existing T7 115 kV transmission line was constructed in the late 1940’s to early 1950’s and extends a distance of approximately 18 miles, from the Pawtucket substation to the Somerset (MA) substation. Approximately 2.7 miles of the T7 line is in Pawtucket; the balance is in Massachusetts. The right-of-way (“ROW”) in Rhode Island contains two sets of double circuit lattice transmission towers (see Fig. 4-1) carrying a total of three 115 kV lines. The X3 and P11 lines are supported on the southern set of towers and the T7 line is on the northern set of towers. ER, §3.2.1 and Figs. 4-1 and 4-2.

C. Need for the Project

The need for the Project was identified in a National Grid transmission planning study. This study, the Greater Rhode Island Transmission Reinforcement Study, reported that the T7 Line will be overloaded under contingency conditions for 2011 peak load conditions. ER, §2.4. The ER explains and Mr. Beron testified that overloading a transmission line can cause overheating which can damage the line and lead to shedding of load and outages to customers served by the line. ER, §§2.4 and 2.5.

D. Project Description

National Grid proposes to re-conductor the existing T7 line by replacing the existing conductors with larger conductors that are capable of carrying more power. ER, §3.2. This will necessitate the reinforcement of many of the existing twenty six (26) lattice towers that support the line and the replacement of seven (7) of them. The replacement structures will be galvanized steel pole double circuit structures. ER, Fig. 4-2. All of the work will occur within the existing ROW.

E. Construction Practices

Mr. Beron testified that for each of the new structures, National Grid will construct a concrete foundation. After the foundations are installed, National Grid will erect the new pole structures on the foundations and string new conductors. The existing structures will be removed using a crane and backhoe and disposed of appropriately. The remaining 19 lattice towers will be reinforced by replacing steel members and installing concrete foundation collars. The appearance of these lattice towers will remain the same. Restoration of the ROW will be completed following the construction. Disturbed areas will be mulched and allowed to revegetate.

Where field conditions warrant, soil erosion and sediment controls will be installed during the Project following the procedures identified in the Rhode Island Soil Erosion and Sediment Control Handbook and National Grid's Environmental Guidance Policy No. 3 (EP-3). These controls will function to effectively mitigate potential construction related erosion and sedimentation. ER, §3.2.2. Dr. Sullivan questioned Mr. Beron and Mr. Durand about National Grid's familiarity with new advanced technology for erosion and sediment control. The witnesses were not familiar with the products mentioned by Dr. Sullivan (specifically Filtrexx and Soil-tek) but agreed to examine the feasibility of the technologies for this Project.

IV. Impact of the Project upon the Environment and Public Health, Safety and Welfare.

The Project consists of reconductoring an existing 115 kV transmission line. National Grid must reductor the line in order to continue to provide reliable electric service to its customers in Pawtucket and the northern Rhode Island area, while avoiding overload of the transmission system during certain contingency operating conditions. ER, §§ 2.4 and 2.5.

As part of the Project, National Grid will replace seven (7) of the existing steel lattice structures with galvanized steel pole double circuit structures on concrete foundations. The nineteen (19) other structures on the ROW will be reinforced. ER, §3.2. The Project is described in greater detail in Chapter 3 of the ER.

After describing the natural and social environments that will be affected by the Project (ER, Chapters 5 and 6), the ER analyzed the potential impact of the Project on soils, surface waters, groundwater, vegetation, wetlands and coastal features, wildlife, land use and recreation, community facilities, visual resources, cultural resources, noise, transportation, safety and public health, and electric and magnetic fields. (ER, Ch. 7)

The ER states that the transmission line will be re-conducted in accordance with the National Electrical Safety Code, guidelines established by the Institute of Electrical and Electronic Engineers (“IEEE”), the American National Standards Institute (“ANSI”) and National Grid’s Right-of-Way Vegetation Management Policies and Procedures. ER, §§ 3.2.2.1, 3.6 and 7.15.

National Grid has committed to incorporating practices routinely used to minimize disturbances to vegetation and soil (i.e. haybales, access mats and mulching) in accordance with the Rhode Island Soil Erosion and Sediment Control Handbook and National Grid’s Environmental Guidance Policy No. 3 (EP-3). National Grid expects to trim some trees along the ROW but anticipates no additional tree clearing within the ROW. Existing maintenance roads will be used during construction. ER, §§ 3.2.2 and 7.5. Similarly, the use of erosion control measures in accordance with Best Management Practices that will be overseen by an Environmental Monitor will ensure that, as Mr. Durand testified, the surface waters, groundwater, vegetation, wetlands, and wildlife will not be significantly impacted by the construction. ER, §§ 3.3, 7.0 and 8.2.

Although the Project involves the replacement of seven (7) lattice towers with steel poles, National Grid’s expert stated that this will have very little incremental visual impact. ER, § 7.12 and App. C. Additionally, all transportation and noise impacts will be minimal, and will only exist during the construction phase, as is common for any construction project. ER, §§ 7.11 and 7.14.

Finally, National Grid has explained in the Report that electric field levels will change only slightly from the existing levels and magnetic field levels at the edges of the ROW under average loading conditions will decrease after the Project is completed. Magnetic fields are

projected to increase above present levels at the south edge of the ROW by 2019 as the result of changes in load flows. ER §7.16.

The witnesses were questioned by the Board members and by Board counsel, Patricia Lucarelli. Dr. Sullivan asked whether the public outreach, which Mr. Beron described, had included communications to abutters in languages other than English. Mr. Beron explained that it had only been in English but testified that he was not aware of any communications problems with abutters or other persons. Dr. Sullivan urged that in future projects, the Company be more aware of the need to communicate with people who do not speak English, which Dr. Sullivan characterized as environmental justice. Mr. Beron agreed to examine this issue for future projects.

VI. Conclusion.

The testimony and exhibits presented by the National Grid witnesses demonstrate that the proposal to reconductor the T7 transmission line will not result in a significant impact on the environment or on the public health, safety and welfare. Furthermore, the Board finds that, with the comments made to the Board during the hearing, National Grid has taken appropriate steps to mitigate construction and other impacts of the Project.

Accordingly, it is:

(60) ORDERED:

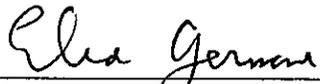
For the reasons discussed above, the Energy Facility Siting Board hereby grants to the Narragansett Electric Company d/b/a National Grid a license under Chapter 98 of Title 42 to authorize it to reconductor the T7 115 kV transmission line as previously described, subject to the following:

- (i) receipt by National Grid of all other permits required for the Project; and

- (ii) the agreement of National Grid to examine the feasibility of advanced erosion and sediment control measures.

DATED AND EFFECTIVE at Warwick, Rhode Island on May 15, 2008 pursuant to an open meeting decision. Written Order issued July 15, 2008.

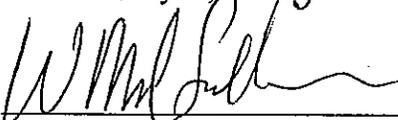
ENERGY FACILITY SITING BOARD



Elia Germani, Chairman



Kevin M. Flynn, Member



W. Michael Sullivan, Ph.D., Member